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RAW SEQUENCE LISTING DATE: 04/26/2001
PATENT APPLICATION: US/09/769,970 TIME: 17:20:02

Input Set : N:\Crf3\RULE60\09769970.txt
Output Set: N:\CRF3\04262001\I769970.raw

SEQUENCE LISTING

C--> 3 (1) GENERAL INFORMATION:
5 (i) APPLICANT: Bandman, Olga
6 Hillman, Jennifer L.
7 Corley, Neil C.
8 Guegler, Karl G.
9 Lal, Preeti
10 Goli, Surya K.
11 Shah, Purvi
C--> 13 (ii) TITLE OF INVENTION: DISEASE ASSOCIATED PROTEIN
14 KINASES
16 (iii) NUMBER OF SEQUENCES: 21
18 (iv) CORRESPONDENCE ADDRESS:
19 (A) ADDRESSEE: Incyte Pharmaceuticals, Inc.
20 (B) STREET: 3174 Porter Drive
21 (C) CITY: Palo Alto
22 (D) STATE: CA
23 (E) COUNTRY: USA
24 (F) ZIP: 94304
26 (v) COMPUTER READABLE FORM:
27 (A) MEDIUM TYPE: Diskette
28 (B) COMPUTER: IBM Compatible
29 (C) OPERATING SYSTEM: DOS
30 (D) SOFTWARE: FastSEQ for Windows Version 2.0
32 (vi) CURRENT APPLICATION DATA:
C--> 33 (A) APPLICATION NUMBER: US/09/769,970
C--> 34 (B) FILING DATE: 24-Jan-2001
35 (C) CLASSIFICATION:
37 (vii) PRIOR APPLICATION DATA:
38 (A) APPLICATION NUMBER: 09/272,796
39 (B) FILING DATE:
43 (viii) ATTORNEY/AGENT INFORMATION:
44 (A) NAME: Billings, Lucy J J
45 (B) REGISTRATION NUMBER: 36,749
46 (C) REFERENCE/DOCKET NUMBER: PF-0321 US
48 (ix) TELECOMMUNICATION INFORMATION:
49 (A) TELEPHONE: 415-855-0555
50 (B) TELEFAX: 415-845-4166
51 (C) TELEX:
54 (2) INFORMATION FOR SEQ ID NO: 1:
56 (i) SEQUENCE CHARACTERISTICS:
57 (A) LENGTH: 685 amino acids
58 (B) TYPE: amino acid
59 (C) STRANDEDNESS: single
60 (D) TOPOLOGY: linear
62 (vii) IMMEDIATE SOURCE:
63 (A) LIBRARY: HUVENOB01

ENTERED

RAW SEQUENCE LISTING DATE: 04/26/2001
PATENT APPLICATION: US/09/769,970 TIME: 17:20:02

Input Set : N:\Crf3\RULE60\09769970.txt
Output Set: N:\CRF3\04262001\I769970.raw

(B) CLONE: 39043

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

```
Met Glu Leu Leu Arg Thr Ile Thr Tyr Gln Pro Ala Ala Ser Thr Lys
 1               5                  10                  15
Met Cys Glu Gln Ala Leu Gly Lys Gly Cys Gly Ala Asp Ser Lys Lys
            20                  25                  30
Lys Arg Pro Pro Gln Pro Pro Glu Glu Ser Gln Pro Pro Gln Ser Gln
        35                  40                  45
Ala Gln Val Pro Pro Ala Ala Pro His His His His His His Ser His
    50                  55                  60
Ser Gly Pro Glu Ile Ser Arg Ile Ile Val Asp Pro Thr Thr Gly Lys
65                  70                  75                  80
Arg Tyr Cys Arg Gly Lys Val Leu Gly Lys Gly Gly Phe Ala Lys Cys
                85                  90                  95
Tyr Glu Met Thr Asp Leu Thr Asn Asn Lys Val Tyr Ala Ala Lys Ile
            100                 105                 110
Ile Pro His Ser Arg Val Ala Lys Pro His Gln Arg Glu Lys Ile Asp
        115                 120                 125
Lys Glu Ile Glu Leu His Arg Ile Leu His His Lys His Val Val Gln
    130                 135                 140
Phe Tyr His Tyr Phe Glu Asp Lys Glu Asn Ile Tyr Ile Leu Leu Glu
145                 150                 155                 160
Tyr Cys Ser Arg Arg Ser Met Ala His Ile Leu Lys Ala Arg Lys Val
                165                 170                 175
Leu Thr Glu Pro Glu Val Arg Tyr Tyr Leu Arg Gln Ile Val Ser Gly
            180                 185                 190
Leu Lys Tyr Leu His Glu Gln Glu Ile Leu His Arg Asp Leu Lys Leu
        195                 200                 205
Gly Asn Phe Phe Ile Asn Glu Ala Met Glu Leu Lys Val Gly Asp Phe
    210                 215                 220
Gly Leu Ala Ala Arg Leu Glu Pro Leu Glu His Arg Arg Arg Thr Ile
225                 230                 235                 240
Cys Gly Thr Pro Asn Tyr Leu Ser Pro Glu Val Leu Asn Lys Gln Gly
                245                 250                 255
His Gly Cys Glu Ser Asp Ile Trp Ala Leu Gly Cys Val Met Tyr Thr
            260                 265                 270
Met Leu Leu Gly Arg Pro Pro Phe Glu Thr Thr Asn Leu Lys Glu Thr
        275                 280                 285
Tyr Arg Cys Ile Arg Glu Ala Arg Tyr Thr Met Pro Ser Ser Leu Leu
    290                 295                 300
Ala Pro Ala Lys His Leu Ile Ala Ser Met Leu Ser Lys Asn Pro Glu
305                 310                 315                 320
Asp Arg Pro Ser Leu Asp Asp Ile Ile Arg His Asp Phe Phe Leu Gln
                325                 330                 335
Gly Phe Thr Pro Asp Arg Leu Ser Ser Ser Cys Cys His Thr Val Pro
            340                 345                 350
Asp Phe His Leu Ser Ser Pro Ala Lys Asn Phe Phe Lys Lys Ala Ala
        355                 360                 365
Ala Ala Leu Phe Gly Gly Lys Lys Asp Lys Ala Arg Tyr Ile Asp Thr
```

RAW SEQUENCE LISTING DATE: 04/26/2001
PATENT APPLICATION: US/09/769,970 TIME: 17:20:02

Input Set : N:\Crf3\RULE60\09769970.txt
Output Set: N:\CRF3\04262001\I769970.raw

```
115      370                 375                 380
116  His Asn Arg Val Ser Lys Glu Asp Glu Asp Ile Tyr Lys Leu Arg His
117  385                 390                 395                 400
118  Asp Leu Lys Lys Thr Ser Ile Thr Gln Gln Pro Ser Lys His Arg Thr
119                  405                 410                 415
120  Asp Glu Glu Leu Gln Pro Pro Thr Thr Thr Val Ala Arg Ser Gly Thr
121              420                 425                 430
123  Pro Ala Val Glu Asn Lys Gln Gln Ile Gly Asp Ala Ile Arg Met Ile
124          435                 440                 445
125  Val Arg Gly Thr Leu Gly Ser Cys Ser Ser Ser Ser Glu Cys Leu Glu
126      450                 455                 460
127  Asp Ser Thr Met Gly Ser Val Ala Asp Thr Val Ala Arg Val Leu Arg
128  465                 470                 475                 480
129  Gly Cys Leu Glu Asn Met Pro Glu Ala Asp Cys Ile Pro Lys Glu Gln
130                  485                 490                 495
131  Leu Ser Thr Ser Phe Gln Trp Val Thr Lys Trp Val Asp Tyr Ser Asn
132              500                 505                 510
133  Lys Tyr Gly Phe Gly Tyr Gln Leu Ser Asp His Thr Val Gly Val Leu
134          515                 520                 525
135  Phe Asn Asn Gly Ala His Met Ser Leu Leu Pro Asp Lys Lys Thr Ala
136      530                 535                 540
137  His Tyr Tyr Ala Glu Leu Gly Gln Cys Ser Val Phe Pro Ala Thr Asp
138  545                 550                 555                 560
139  Ala Pro Glu Gln Phe Ile Ser Gln Val Thr Val Leu Lys Tyr Phe Ser
140                  565                 570                 575
141  His Tyr Met Glu Glu Asn Leu Met Asp Gly Gly Asp Leu Pro Ser Val
142              580                 585                 590
143  Thr Asp Ile Arg Arg Pro Arg Leu Tyr Leu Leu Gln Trp Leu Lys Ser
144          595                 600                 605
145  Asp Lys Ala Leu Met Met Leu Phe Asn Asp Gly Thr Phe Gln Val Asn
146      610                 615                 620
147  Phe Tyr His Asp His Thr Lys Ile Ile Ile Cys Ser Gln Asn Glu Glu
148  625                 630                 635                 640
149  Tyr Leu Leu Thr Tyr Ile Asn Glu Asp Arg Ile Ser Thr Thr Phe Arg
150                  645                 650                 655
151  Leu Thr Thr Leu Leu Met Ser Gly Cys Ser Ser Glu Leu Lys Asn Arg
152              660                 665                 670
153  Met Glu Tyr Ala Leu Asn Met Leu Leu Gln Arg Cys Asn
154          675                 680                 685
156 (2) INFORMATION FOR SEQ ID NO: 2:
158      (i) SEQUENCE CHARACTERISTICS:
159           (A) LENGTH: 448 amino acids
160           (B) TYPE: amino acid
161           (C) STRANDEDNESS: single
162           (D) TOPOLOGY: linear
164     (vii) IMMEDIATE SOURCE:
165           (A) LIBRARY: TBLYNOT01
166           (B) CLONE: 40194
168      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
```

RAW SEQUENCE LISTING DATE: 04/26/2001
PATENT APPLICATION: US/09/769,970 TIME: 17:20:02

Input Set : N:\Crf3\RULE60\09769970.txt
Output Set: N:\CRF3\04262001\I769970.raw

```
Met Pro Pro Lys Arg Asn Glu Lys Tyr Lys Leu Pro Ile Pro Phe Pro
 1               5                  10                  15
Glu Gly Lys Val Leu Asp Asp Met Glu Gly Asn Gln Trp Val Leu Gly
            20                  25                  30
Lys Lys Ile Gly Ser Gly Gly Phe Gly Leu Ile Tyr Leu Ala Phe Pro
        35                  40                  45
Thr Asn Lys Pro Glu Lys Asp Ala Arg His Val Val Lys Val Glu Tyr
    50                  55                  60
Gln Glu Asn Gly Pro Leu Phe Ser Glu Leu Lys Phe Tyr Gln Arg Val
65                  70                  75                  80
Ala Lys Lys Asp Cys Ile Lys Lys Trp Ile Glu Arg Lys Gln Leu Asp
                85                  90                  95
Tyr Leu Gly Ile Pro Leu Phe Tyr Gly Ser Gly Leu Thr Glu Phe Lys
            100                 105                 110
Gly Arg Ser Tyr Arg Phe Met Val Met Glu Arg Leu Gly Ile Asp Leu
        115                 120                 125
Gln Lys Ile Ser Gly Gln Asn Gly Thr Phe Lys Lys Ser Thr Val Leu
    130                 135                 140
Gln Leu Gly Ile Arg Met Leu Asp Val Leu Glu Tyr Ile His Glu Asn
145                 150                 155                 160
Glu Tyr Val His Gly Asp Val Lys Ala Ala Asn Leu Leu Leu Gly Tyr
                165                 170                 175
Lys Asn Pro Asp Gln Val Tyr Leu Ala Asp Tyr Gly Leu Ser Tyr Arg
            180                 185                 190
Tyr Cys Pro Asn Gly Asn His Lys Gln Tyr Gln Glu Asn Pro Arg Lys
        195                 200                 205
Gly His Asn Gly Thr Ile Glu Phe Thr Ser Leu Asp Ala His Lys Gly
    210                 215                 220
Val Gly Glu Ile Ala Gln Phe Leu Val Cys Ala His Ser Leu Ala Tyr
225                 230                 235                 240
Asp Glu Lys Pro Asn Tyr Gln Ala Leu Lys Lys Ile Leu Asn Pro His
                245                 250                 255
Gly Ile Pro Leu Gly Pro Leu Asp Phe Ser Thr Lys Gly Gln Ser Ile
            260                 265                 270
Asn Val His Thr Pro Asn Ser Gln Lys Val Asp Ser Gln Lys Ala Ala
        275                 280                 285
Thr Lys Gln Val Asn Lys Ala His Asn Arg Leu Ile Glu Lys Lys Val
    290                 295                 300
His Ser Glu Arg Ser Ala Glu Ser Cys Ala Thr Trp Lys Val Gln Lys
305                 310                 315                 320
Glu Glu Lys Leu Ile Gly Leu Met Asn Asn Glu Ala Ala Gln Glu Ser
                325                 330                 335
Thr Arg Arg Arg Gln Lys Tyr Gln Glu Ser Gln Glu Pro Leu Asn Glu
            340                 345                 350
Val Asn Ser Phe Pro Gln Lys Ile Ser Tyr Thr Gln Phe Pro Asn Ser
        355                 360                 365
Phe Tyr Glu Pro His Gln Asp Phe Thr Ser Pro Asp Ile Phe Lys Lys
    370                 375                 380
Ser Arg Ser Pro Ser Trp Tyr Lys Tyr Thr Ser Thr Val Ser Thr Gly
```

RAW SEQUENCE LISTING DATE: 04/26/2001
PATENT APPLICATION: US/09/769,970 TIME: 17:20:03

Input Set : N:\Crf3\RULE60\09769970.txt
Output Set: N:\CRF3\04262001\I769970.raw

```
220  385                 390                 395                 400
221  Ile Thr Asp Leu Glu Ser Ser Thr Gly Leu Trp Pro Thr Ile Ser Gln
222                  405                 410                 415
223  Phe Thr Leu Ser Glu Glu Thr Asn Ala Asp Val Tyr Tyr Tyr Arg Ile
224              420                 425                 430
225  Ile Ile Pro Val Leu Leu Met Leu Val Phe Leu Ala Leu Phe Phe Leu
226          435                 440                 445
228 (2) INFORMATION FOR SEQ ID NO: 3:
230      (i) SEQUENCE CHARACTERISTICS:
231           (A) LENGTH: 400 amino acids
232           (B) TYPE: amino acid
233           (C) STRANDEDNESS: single
234           (D) TOPOLOGY: linear
236    (vii) IMMEDIATE SOURCE:
237           (A) LIBRARY: TMLR3DT01
238           (B) CLONE: 402339
240     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
242  Met Leu Ala Arg Arg Lys Pro Val Leu Pro Ala Leu Thr Ile Asn Pro
243   1               5                  10                  15
244  Thr Ile Ala Glu Gly Pro Ser Pro Thr Ser Glu Gly Ala Ser Glu Ala
245              20                  25                  30
246  Asn Leu Val Asp Leu Gln Lys Lys Leu Glu Glu Leu Glu Leu Asp Glu
247          35                  40                  45
248  Gln Gln Lys Lys Arg Leu Glu Ala Phe Leu Thr Gln Lys Ala Lys Val
249      50                  55                  60
250  Gly Glu Leu Lys Asp Asp Asp Phe Glu Arg Ile Ser Glu Leu Gly Ala
251  65                  70                  75                  80
252  Gly Asn Gly Gly Val Val Thr Lys Val Gln His Arg Pro Ser Gly Leu
253                  85                  90                  95
254  Ile Met Ala Arg Lys Leu Ile His Leu Glu Ile Lys Pro Ala Ile Arg
255              100                 105                 110
256  Asn Gln Ile Ile Arg Glu Leu Gln Val Leu His Glu Cys Asn Ser Pro
257          115                 120                 125
258  Tyr Ile Val Gly Phe Tyr Gly Ala Phe Tyr Ser Asp Gly Glu Ile Ser
259      130                 135                 140
260  Ile Cys Met Glu His Met Asp Gly Gly Ser Leu Asp His Leu Leu Lys
261  145                 150                 155                 160
262  Glu Ala Lys Arg Ile Pro Glu Glu Ile Leu Gly Lys Val Ser Ile Ala
263                  165                 170                 175
264  Val Leu Arg Gly Leu Ala Tyr Leu Arg Glu Lys His Gln Ile Met His
265              180                 185                 190
266  Arg Asp Val Lys Pro Ser Asn Ile Leu Val Asn Ser Arg Gly Glu Ile
267          195                 200                 205
268  Lys Leu Cys Asp Phe Gly Val Ser Gly Gln Leu Ile Asp Ser Met Ala
269      210                 215                 220
270  Asn Ser Phe Val Gly Thr Arg Ser Tyr Met Ala Pro Glu Arg Leu Gln
271  225                 230                 235                 240
272  Gly Thr His Tyr Ser Val Gln Ser Asp Ile Trp Ser Met Gly Leu Ser
273                  245                 250                 255
```

VERIFICATION SUMMARY DATE: 04/26/2001
PATENT APPLICATION: US/09/769,970 TIME: 17:20:04

Input Set : N:\Crf3\RULE60\09769970.txt
Output Set: N:\CRF3\04262001\I769970.raw

L:3 M:220 C: Keyword misspelled or invalid format, [(1) GENERAL INFORMATION:]
L:13 M:220 C: Keyword misspelled or invalid format, [(ii) TITLE OF INVENTION:]
L:33 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:34 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5